

REMARKS

Claims 1, 3, 4, 13-15, 17-22, and 24-52 are pending in the present application. In the Office Action mailed December 19, 2006, the Examiner rejected claims 1, 3, 4, 13, 14, 22, 24-28, 34, 36, 37, 41, and 42 under 35 U.S.C. §102(e) as being anticipated by Tsunota et al. (US Pub. 2003/0178570), hereinafter “Tsunota.” The Examiner next rejected claim 35 under 35 U.S.C. §103(a) as being unpatentable over Tsunota et al.

Claims 15, 17-21, 43, 44, and 49-52 are allowed. Claims 29-33, 38-40, and 45-48 are indicated as containing allowable subject matter. Such indication is appreciated.

The drawings were objected to by the Examiner. Applicant has amended Figures 6 and 7, attached herein as replacement sheets 1 and 2 of 2, and Applicant has amended supporting text in paragraphs [0034] through [0045], to clarify the supporting text. In particular, element 91 has been deleted from the figures and text, and element 89 has been added. Element 84 in Fig. 6 has been deleted. References to elements 57, 83, 86, 88, 89, 90, 94, and 98 have been added, where appropriate, to clarify references in the related text. No new matter has been added.

The Examiner rejected claims 1, 22, 34, 36, 37, 41, and 42 under 35 U.S.C. §102(e) as being anticipated by Tsunota. Tsunota teaches “a cured mixture of a rutile type titanium oxide powder and a polyester resin is used for the light reflecting material covering [the] scintillators.” *See Tsunota '570, Abstract.* A plurality of laminated scintillators are arranged side by side having a light reflecting material provided around the scintillators, “the light reflecting material being made of a mixture consisting of a polyester resin and a rutile type titanium oxide powder.” *Id.*, para. [0013]. Tsunota further teaches:

The radiation detector 600 illustrated in FIG. 6 is generally referred to as a multi-array, in which scintillators 430 are arranged in a grid pattern, and which structure is such that there are radiation shielding plates 550 within the portions, interposed between the scintillators 430, of a light reflecting material 640. *Id.*, para. [0005] (emphasis added).

Tsunota teaches that radiation shielding plates 550, “made of heavy metals such as Mo, W, Pb, and the like, can be provided between the scintillators to prevent the passage of the radiation between the scintillators.” *Id.*, para. [0006]. Thus, Tsunota teaches a plurality of scintillators having a cured mixture of a polyester resin and titanium oxide reflector therebetween, and radiation shielding plates interposed between the scintillators.

Tsunota does not teach or suggest that called for by Applicant. Claim 1 calls for, in part, a CT detector comprising a light absorption element disposed between a pair of reflective

elements. Claim 22 calls for, in part, a method of CT detector manufacturing comprising a light absorbing composite layer between reflective layers that are disposed between adjacent scintillators. Amended claim 34 calls for, in part, a CT detector comprising a composite reflector interstitially disposed between at least two adjacent scintillators, the composite reflector including a light absorption element disposed between a pair of reflective elements. Amended claim 36 calls for, in part, a CT detector comprising a reflector that includes a light absorption element disposed between a pair of reflective elements wherein the light absorption element extends in length to an upper surface of the reflective top coat. Claim 37 calls for, in part, a CT detector comprising a reflector including a light absorption element disposed between a pair of reflective elements. Claim 41 calls for, in part, a CT detector comprising reflector including a light absorption element disposed between a pair of reflective elements. Claim 42 calls for, in part, a CT system comprising a reflector assembly disposed between adjacent scintillators of a scintillator array, wherein each reflector assembly includes a first light absorptive layer sandwiched between at least a pair of reflective layers.

Tsunota does not teach or suggest a “light absorption element,” a “light absorbing composite layer,” or a “light absorption layer” as called for by Applicant in claims 1, 22, 37, 41, and 42. Tsunota teaches that the material disposed between the reflectors is a radiation shielding plate. Tsunota fails to teach that the radiation shielding plate absorbs light. In fact, Tsunota fails to disclose light absorption at all.

Furthermore, Tsunota does not teach or suggest a reflector including a light absorption composite element disposed between a pair of reflective elements as called for in claim 34, or a light absorption element that extends to an upper surface of a reflective top coat as called for in claim 36.

Accordingly, that which is called for in claims 1, 22, 34, 36, 37, 41, and 42 is not shown, disclosed, taught, or suggested in the art of record. Therefore, the art of record fails to anticipate claims 1, 22, 34, 36, 37, 41, and 42 under 35 U.S.C. §102(e). As such, Applicant believes that claims 1, 22, 34, 36, 37, 41, and 42, and the claims that depend therefrom, are patentably distinct from the art of record.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1, 3, 4, 13-15, 17-22, and 24-52.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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